Section Three

Appendix A
Measures of Health in Texas

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Texas Department of Health has the statutory duty to identify, assess, and appropriately manage threats to the health of the public. But it is impossible to monitor all the factors that demonstrate when and where health problems exist. Tracking health problems in the state depends first on clear, agreed-upon, standard measures that represent a breadth of health outcomes (that is, the numbers of health problems that occur, such as disease and death rates) and health determinants (the factors that influence good or poor health, such as the level of unhealthy behaviors, social and environmental conditions, or characteristics of the health care system).

There is an abundance of information about health in the state of Texas. The start of a new decade offers a good opportunity for Texas to assess information it already has, identify what important information is missing, and then define a standard set of health measures. These measures would then be used to describe health status locally and statewide, to mobilize action on priorities, and to evaluate progress in addressing priority health problems.

Health Status Indicators

Public health practice follows the premise that the health of communities, states, or countries can be described meaningfully. But health is a complicated thing to define, and it is even more difficult to measure. Health outcomes – illness or wellness – result from a complex mix of

- genetic predispositions or resistances,
- individual behaviors and choices about health risks,
- physical hazards and socio-cultural factors in the environment,
- barriers to health care (affecting access to care, timely detection of health problems, and effective treatment), and
- public health and health care policy and interventions.

To account for the complexity of health, a population's health status is usually described by a collection of different measures that illustrate different aspects of health. Individually, each measure describes important health facts about the

population. When these measures are taken together, they form an index that indicates the general health status of a population.

Through sets of health status indicators, public health practitioners can compare groups of people, look for apparent differences in how healthy they are, try to understand the differences, and work for improvements. The challenge Texas faces now is in identifying the set of indicators that presents the most accurate picture of health status.

The Centers for Disease Control offers a framework of health indicators grouped in eleven categories that range from measures of disease occurrence to economic measures to more subjective quality of life issues:

Demographic Characteristics
Demographic characteristics include measures of total population as well as percent of total population by age group, gender, race and ethnicity, where these populations and subpopulations are located, and the rate of change in population density over time, due to births, deaths and migration patterns.

Socioeconomic Characteristics
Socioeconomic characteristics that have been shown to affect health status include income, education, and employment, and the proportion of the population represented by various levels of these variables.

Community Health Status
Health status in a community is measured in terms of mortality (rates of death within a population) and morbidity (the incidence and prevalence of disease).

Maternal and Child Health Characteristics
This category focuses on birth data and outcomes as well as mortality data for infants and children. Because prenatal care is correlated with birth outcomes, measures of maternal access to, and/or utilization of, care is included. Number of births to teen mothers is a critical indicator of increased risk for both mother and child.

Behavioral Risk Factors
Risk factors are the behaviors believed to cause, or to be contributing factors to, accidents, injuries, disease, and death during youth and adolescence and significant morbidity and mortality in later life.

Environmental Health Characteristics

The environmental health indicators reflect the quality of our physical environment, including air, water, and food that directly impacts health and quality of life as well as exposure to environmental substances such as lead or hazardous waste increase risk for preventable disease.

Infectious Disease Patterns

Measures within this category include the incidence of diseases that are usually transmitted through person-to-person contact or shared use of contaminated materials.

Sentinel Events

Sentinel events are those cases of unnecessary disease, disability, or untimely death that could be avoided if appropriate and timely preventive services or medical care were provided. Sentinel events may alert the community to health system problems such as inadequate vaccine coverage or lack of primary care and/or screening.

Social and Mental Health Characteristics

These indicators represent social and mental health conditions that directly or indirectly influence overall health status and individual and community quality of life.

Community Assets and Quality of Life

Community assets are those contributions made by individuals, citizen associations and local institutions that individually and/or collectively build the community's capacity to assure the health, well-being and quality of life of the community and all its members.

Health Resources

These indicators represent factors associated with health system capacity, which may include the number of licensed and credential health personnel and the physical capacity of health facilities. In addition, these indicators include measures of access, utilization, service delivery patterns, cost and quality of health care and prevention services.

The Centers for Disease Control has also suggested specific health indicators to be used at the community or state level to measure progress in the above-mentioned categories. Many of these indicators are currently available in Texas (see Attachment A-1).

As public health practice works to improve the population's health, health status indicators are the tools used to measure impact. Ultimately, however, the most valuable health indicators go beyond simply describing health status. They also give clues about the determinants of health, about what causes poor health outcomes in the first place, and about which interventions would most effectively improve health status. Identifying health problems requires objective data, but prioritization of health problems requires value-laden decisions statewide and at the local community level where the problems (and their resolution) are part of daily life.

The role of the Department of Health in this effort is to:
a) develop and set statewide standards for common measures, and
b) assist communities with objective health status information so they can determine their own priorities.

Through state leadership and collaboration with local communities, Texas can develop the state and local systems it needs to effectively monitor community health status, accurately identify health problems, prioritize them for action, and develop effective solutions.